

BEFORE  
THE PUBLIC SERVICE COMMISSION OF  
SOUTH CAROLINA

Docket No. 2012-357-A

In re: Application of Chem-Nuclear Systems, )	
LLC, a subsidiary of Duratek, Inc., for )	
Adjustment in the Levels of Allowable )	
Costs and for Identification of Allowable )	<b>SECOND AMENDED</b>
Costs )	<b>APPLICATION</b>
_____ )	(for Fiscal Year 2012-2013)

Pursuant to the provisions of S.C. Code Ann. § 48-46-40(B)(4) (Supp. 2010), Chem-Nuclear Systems, LLC, a subsidiary of Duratek, Inc., (“Chem-Nuclear” or the “Company”) submits this Second Amended Application for adjustment in the levels of certain “allowable costs” and for the identification of certain “allowable costs” for the operation of its regional low-level radioactive waste disposal facility located in the vicinity of Barnwell, South Carolina. In support of the relief which it requests in this Second Amended Application, Chem-Nuclear would respectfully show unto this honorable Commission:

1. On June 6, 2000, the Governor of the State of South Carolina signed the Atlantic Interstate Low-Level Radioactive Waste Compact Implementation Act (the “Act”). The Act is codified as S.C. Code Ann. §§ 48-46-10, *et seq.* (1976), as amended.

2. Section 48-46-40(B)(1) of the Act authorizes and directs the Commission “to identify allowable costs for operating a regional low-level radioactive waste disposal facility in South Carolina.” Section 48-46-30(1) defines “allowable costs” as “costs to a disposal site operator of operating a regional disposal facility.” Under that definition, such costs “are limited to costs determined by standard accounting practices and regulatory findings to be associated with facility operations.”

3. Section 48-46-40(B)(3) of the Act provides that “allowable costs” expressly include the costs of certain specifically identified activities necessary in the operation of a low-level radioactive waste disposal facility. That Section also provides that “allowable costs” include “any other costs directly associated with disposal operations determined by [the Commission] to be allowable.”

4. Chem-Nuclear operates a regional low-level radioactive waste disposal facility in Barnwell County, South Carolina (the “Facility”). Consequently, the Commission has the authority to identify the “allowable costs” for the Company’s operation of the Facility.

5. The Facility is located on a tract of land consisting of approximately 235 acres which the State of South Carolina owns and which the Company leases from the South Carolina Budget and Control Board (the “Board”). The 235-acre site includes areas for various operations, including completed disposal trenches, potential trench areas, ancillary facilities, water management areas and buffer zone areas.

6. The Company conducts its operations at the Facility under South Carolina Radioactive Material License 097 (“License 097”) by which the South Carolina Department of Health and Environmental Control (“DHEC”) has authorized receipt, storage and disposal of low-level radioactive waste at the Facility. License 097 contains numerous technical conditions and specifications for management of waste at the Facility. In addition to the requirements of License 097, the Facility is subject to DHEC’s regulations in 24A S.C. Code Reg. 61-63 (Supp. 2010). DHEC’s regulations are compatible with the provisions of “Licensing Requirements for Land Disposal of Radioactive Wastes,” which the United States Nuclear Regulatory Commission (“NRC”) originally promulgated in 10 C.F.R. Part 61, and DHEC has adopted most of those provisions and enforces them through its own regulations under an agreement with the NRC.

7. On May 22, 2012, the Commission issued its Order No. 2012-400 in Docket No. 2000-366-A. In that Order, the Commission identified certain categories of “allowable costs” and identified levels of “allowable costs” within those categories. Order No. 2012-400 approved certain rates for variable allowable costs and identified the sum of \$2,754,248 for total fixed allowable costs for the 12 months ending June 30, 2012. The Order also approved irregular costs of \$187,654 as allowable costs.

8. S.C. Code Ann. § 48-46-40(B)(4) (Supp. 2010) provides that an operator of a low-level radioactive waste disposal site may apply for adjustments in the levels of “allowable costs” that the Commission has identified for the previous fiscal year and for identification of costs that the Commission has not previously identified as “allowable costs.” Upon approval of such application, Section 48-46-40(B)(4) requires the Commission to authorize the site operator to adjust its “allowable costs” for the current fiscal year to compensate the site operator for revenues lost during the previous fiscal year.

9. On September 28, 2012, the Company filed an Application (The “Original Application”) identifying our actual costs for Fiscal Year 2011-12 and our proposed costs for Fiscal Year 2012-2013. On March 15, 2012, the Company filed an Amended Application as a result of reaching a settlement on adjusted costs as identified by the Office of Regulatory Staff. This Second Amended Application corrects typographical errors in the Amended Exhibits that do not alter the totals reflected in the exhibits.

10. For the purposes of this Second Amended Application and its Exhibits, the Company has used the cost categories that the Commission approved in Order No. 2012-400, which were based on the recommendations of the parties to the Collaborative Review of the Company’s Operations and Efficiency Plan (“OEP”).

11. During the Company’s recently concluded Fiscal Year 2011-2012 (*i.e.*, the twelve months ending June 30, 2012), the Company’s actual “allowable costs” in those categories that

the Commission identified in Order No. 2012-400 for fixed costs were \$2,876,147. By this Second Amended Application, the Company requests the Commission to approve the levels of actual fixed allowable costs for Fiscal Year 2011-2012 to permit the Company to be compensated for those allowable fixed cost components identified in Order No. 2012-400, as authorized by Section 48-46-40(B)(4). Consequently, the Company proposes an adjustment of \$121,899 for allowable fixed costs in this Second Amended Application.

12. With respect to those allowable costs which Order No. 2012-400 characterized as irregular costs, the Company incurred total irregular costs for Fiscal Year 2011-2012 which are \$71,754 more than the costs identified in Order No. 2012-400. The \$71,754 includes \$71,493 of Operations Irregular Costs and \$261 of Institutional Overage Costs, which represents Institutional Costs over the annual cap that can be paid from the Decommissioning Trust Fund. Therefore, the Company proposes an adjustment of \$71,754 for irregular costs in this Second Amended Application.

13. With respect to the allowable costs that Order No. 2012-400 characterized as variable labor and non-labor costs, which are dependent upon volumes of waste buried, the Company incurred actual costs in the category of variable labor and non-labor costs in Fiscal Year 2011-2012 of \$231,559, which is less than the costs identified in Order No. 2012-400, using the variable cost rates identified by the Commission in that Order for categories of waste and using the volumes of waste buried in Fiscal Year 2011-2012. Therefore, the Company requests no adjustment for variable labor and non-labor costs in this Second Amended Application.

14. With respect to vault costs, Order No. 2012-400 established certain variable cost rates for each type of waste disposed at the Facility. By applying those rates to the volumes of each type of waste actually buried in Fiscal Year 2011-2012, the Company had calculated a total

cost for routine disposal vaults of \$417,257. Based on the Company's actual experience in Fiscal Year 2011-2012, the Company incurred a cost of \$437,861 for routine disposal vaults. Therefore, the Company proposes an adjustment of \$20,604 for this category.

15. The Company has attached to this Second Amended Application three (3) exhibits pertaining to the adjustments and identification of the categories of "allowable costs" for its disposal operations.

16. Second Amended Exhibit A to this Second Amended Application describes in detail the Company's proposed adjustments for the recovery of its actually incurred costs for fixed, variable and irregular costs to reflect the differences between the level of "allowable costs" identified in Order No. 2012-400 and the level of the Company's actually incurred costs in Fiscal Year 2011-2012. Second Amended Exhibit A also provides the rates for variable costs which were contained in Order No. 2012-400.

17. Second Amended Exhibit B describes the actual irregular costs which the Company incurred in Fiscal Year 2011-2012, organized by project number.

18. Second Amended Exhibit C depicts the total fixed costs, irregular costs and variable cost rates that the Company proposes for identification and approval for Fiscal Year 2012-2013.

19. For Fiscal Year 2012-2013, the Company requests identification as "allowable costs" a total of \$2,937,390 as allowable fixed costs, as depicted in Second Amended Exhibit C. Second Amended Exhibit C also identifies variable material cost rates and variable waste dependent labor rates for Fiscal Year 2012-2013. Irregular costs for Fiscal Year 2012-2013 anticipated at the time of this Second Amended Application are \$191,172, as specified in Second Amended Exhibit C. The costs and amounts in Second Amended Exhibits A and C are consistent with the description of "allowable costs" in Section 48-46-40(B)(3), and they have been determined by standard accounting practices and are consistent with the recommendations

of the Collaborative Review of the OEP as the Commission approved in Order No. 2004-349 in this Docket.

WHEREFORE, Chem-Nuclear Systems, LLC, a subsidiary of Duratek, Inc., respectfully prays unto this honorable Commission:

1. To review the Company's Second Amended Application and issue its Order, under S.C. Code Ann. § 48-46-40(B)(4) (Supp. 2010), recognizing the levels of "allowable costs" as depicted in Second Amended Exhibit A for Fiscal Year 2011-2012, and identifying the levels of irregular costs in Second Amended Exhibit B for Fiscal Year 2011-2012, and identifying as "allowable costs" those costs depicted in Second Amended Exhibit C for Fiscal Year 2012-2013.

2. For such other and further relief as is just and proper.

Respectfully submitted,

s/ J. David Black

J. David Black  
Sara S. Rogers  
NEXSEN PRUET, LLC  
1230 Main Street, Suite 700  
Post Office Drawer 2426  
Columbia, South Carolina 29202  
(803) 771-8900  
(803) 253-8277  
[DBlack@nexsenpruet.com](mailto:DBlack@nexsenpruet.com)  
[SRogers@nexsenpruet.com](mailto:SRogers@nexsenpruet.com)

Attorneys for Chem-Nuclear Systems, LLC

April 5, 2013

Columbia, South Carolina

**SECOND AMENDED EXHIBIT A:  
FISCAL YEAR 2011-2012  
COSTS  
Fixed Costs: \$121,899 Adjustment Proposed**

Fixed costs, subject to a 29% operating margin, were incurred in fiscal year 2011-2012 in the general categories of labor-related costs, non-labor costs, costs allocated from corporate functions, equipment leases and support, depreciation and insurance. The following table compares the actual costs incurred to the costs identified as allowable in Commission Order No. 2012-400:

	<b>Commission Order No. 2012-400</b>	<b>Actual Costs Incurred in FY 2011-2012</b>	<b>Adjustment Proposed</b>
Labor, Fringe and Non-labor	\$1,530,000	\$1,643,902	
Corporate Allocation (G&A)	\$515,000	\$648,695	
Equipment leases and support	\$154,106	\$149,177	
Depreciation	\$56,385	\$58,468	
Insurance	\$427,031	\$341,596	
Subtotal (Fixed Cost subject to 29% margin)	\$2,682,522	\$2,841,838	
Legal Support	\$71,726	\$34,309	
Subtotal (Fixed Cost <b>not</b> subject to 29% margin)	\$71,726	\$34,309	
<b>Total Fixed Costs</b>	<b>\$2,754,248</b>	<b>\$2,876,147</b>	<b>\$121,899</b>

The actual Fixed Costs incurred during fiscal year 2011-2012 were **\$2,876,147**. This amount is **\$121,899** more than the amount identified in Order Number 2012-400. Therefore, an adjustment of **\$121,899** is requested in this category of costs.

**Variable Costs:**

**Variable Labor and Non-Labor Costs**

**No Adjustment Proposed**

Commission Order No. 2012-400 identified the following categories of rates for projecting Variable Labor and Non-Labor costs: vault purchase and inspection (per vault), ABC waste disposal (per shipment), slit trench operations (per slit trench offload), customer assistance (per shipment), and trench records (per container).

The following table illustrates the Variable Labor and Non-Labor costs that would be calculated using the Variable Labor and Non-Labor rates identified in Order No. 2012-400 and the number of units in each category.

	<b>Units</b>	<b>Variable Cost Rate in Order No. 2012-400</b>	<b>Calculated Cost</b>
Vault Purchase & Inspection (per vault)	68	\$81.35	\$5,532
ABC Waste Disposal (per shipment) (total shipments, less slit trench shipments, less irregular project shipments)	70	\$1,948.78	\$136,415
Slit Trench Operations (per slit trench offload)	3	\$29,787.46	\$89,362
Customer Assistance (per shipment)	73	\$47.64	\$3,478
Trench records (per container)	117	\$130.34	\$15,250
<b>Total Calculated Variable Labor and Non-labor Cost</b>			<b>\$250,037</b>

The actual Variable Labor and Non-Labor costs experienced in the disposal of waste in fiscal year 2011-2012 resulted in a Total Variable Labor and Non-Labor Cost of **\$231,559**. This amount is **\$18,478** less than the amount that would have been anticipated based on rates provided in Commission Order 2012-400. Therefore, Chem-Nuclear requests no adjustment in this category of costs.



**Vault Costs**  
**Adjustment Proposed**

The following table illustrates the vault costs that would be calculated using the Variable Cost rates identified in Commission Order No. 2012-400 and the volumes of waste received in each respective category.

	<b>Volume Buried (cubic feet)</b>	<b>Variable Cost Rate in Order No. 2012-400</b>	<b>Calculated Cost</b>
Class A waste	5,913.14	\$40.61	\$240,133
Class B waste	2,631.00	\$42.08	\$110,712
Class C waste	770.80	\$42.97	\$33,121
Slit Trench waste	173.40	\$191.99	\$33,291
Irregular Components (in vaults as an irregular cost)		N/A	N/A
Irregular Components (not in vaults)		N/A	N/A
<b>Total Calculated Vault Cost</b>			<b>\$417,257</b>
<b>Total Volume (cubic feet)</b>	<b>9,488.34</b>		

The total cost incurred for routine disposal vaults used during fiscal year 2011-2012 was **\$437,861**. This amount is **\$20,604** more than the amount that would have been anticipated based on rates provided in Commission Order 2012-400. Therefore, Chem-Nuclear requests an adjustment in this category of cost of **\$20,604**.

**Irregular Costs  
Adjustment Proposed**

The following table summarizes the Irregular Costs incurred in fiscal year 2011-2012 organized by projects. Exhibit B provides additional descriptions of each of these irregular projects.

<b>Irregular Cost Item</b>	<b>Order No. 2012-400</b>	<b>Actual FY 11-12 Labor</b>	<b>Actual FY 11-12 Non-Labor</b>	<b>Total Cost FY 11-12</b>
Various Trenches (design, construct, and backfill): Trench 98, Trench 91, Trench 99, and Slit Trench 37.	\$98,307	\$41,800	\$151,062	\$192,862
License Renewal and Appeal costs	\$10,000	\$4,865	\$4	\$4,869
Decontamination and Corrective Actions	\$5,000	\$0	\$0	\$0
Site Engineering and Drawing Updates	\$3,000	\$570	\$999	\$1,569
Site Assessments	\$5,000	\$0	\$0	\$0
Record Retention/Waste Tracking		\$2,676		\$2,676
Other Irregular costs (Monitoring Well Abandonment, Special Site Maintenance Projects, repairs to BEDL and B&CB staff support)	\$56,347	\$14,405	\$38,782	\$53,187
Increased Security Controls	\$10,000	\$191	\$3,793	\$3,984
Institutional Overage				\$261
Irregular Costs	\$187,654	\$64,507	\$194,640	\$259,408
<b>Total Irregular Costs</b>	<b>\$187,654</b>	<b>\$64,507</b>	<b>\$194,640</b>	<b>\$259,408</b>

The total costs incurred in fiscal year 2011-2012, as Irregular costs, were **\$259,408** compared to the amount identified in Commission Order No. 2012-400 of **\$187,654**. Chem-Nuclear therefore requests an adjustment in Irregular Costs of **\$71,754** (\$71,493 of Operations Irregular Costs and \$261 of Institutional Costs).

**SECOND AMENDED EXHIBIT B:  
FISCAL YEAR 2011-2012 IRREGULAR COSTS  
ORGANIZED BY PROJECT**

<b>PROJECT NUMBERS</b>	<b>PROJECT NAME AND EXPLANATIONS</b>
188701.8027 188701.8028 188701.8029 188701.8030	<b>Various Trench Construction and Backfill Operations (Labor \$41,799.87 and Non-labor \$151,062.38)</b> Trench construction activities in fiscal year 2011-2012 included design, construction and backfill (including use of free flowing sand where applicable) in Trench 98, Trench 91, Trench 99, and Slit Trench 37.
952188.8001 952188.8004	<b>Appeal DHEC License, License Administration, (Labor \$4,864.24 and Non-Labor \$4.44)</b> Non-routine activities by licensing department and others related to the appeal process for the DHEC radioactive materials license renewal. Included here are costs for CNS labor. Legal expenses are included in fixed costs.
188000.8005 188000.8006	<b>Decontamination and Corrective Actions (Labor \$0 and Non-labor \$0)</b> Includes costs related to decontamination efforts and corrective actions required as a result of waste received for disposal. No costs were incurred in these projects for FY 2011-2012.
188004.8001	<b>Site Engineering &amp; Drawing Updates (Labor \$569.97 and Non-labor \$999.03)</b> Labor costs for site engineering support and preparation and reproduction of site drawings. The engineering support and drawings were required for various analyses and reports submitted to SC DHEC.
952182.8001 952182.8002	<b>Records Retention/Waste Tracking (Labor \$22,676 and Non-Labor \$0)</b> Included here are costs associated with special projects related to site disposal records. Also included are costs for providing SC DHEC with requested data records and analysis.
952192.8002 952183.8002 188000.8012 188000.8013 188004.8002 188007.8001	<b>Other Irregular Costs (Special Site Maintenance, Monitoring Well Abandonment, repairs to the BEDL, and B&amp;CB Staff Support) (Labor \$14,405 and Non-labor \$38,782)</b> Included here are costs for abandoning five monitoring wells and repairs to the disposal site back-up water supply well. Also included here are costs for SC B&CB staff requests.
188008.8001	<b>Increased Security Controls (Labor \$191.07 and Non-labor \$3,793.36)</b> Costs associated with maintenance, repair and replacement of physical security equipment as approved by SC DHEC to implement increased controls over radioactive materials at the disposal site.
189000.0002 189004.0001 189008.0001 189000.2002 952982.0001 952983.0001 952986.0001 952988.0001 955901.6002 952981.0001 952990.0001	<b>Institutional Overage (Labor &amp; Non-Labor \$261)</b> Costs associated with institutional care over the FY 11/12 Institutional cost cap of \$2,111,918.

**SECOND AMENDED EXHIBIT C:  
FISCAL YEAR 2012-2013 COSTS**

We propose the following amounts be identified as allowable costs for fiscal year 2012-2013:

<b>FIXED COSTS</b>	
Fixed Costs to which 29% operating margin is added	
Labor, Fringe and Non-Labor	\$1,721,953
Corporate Allocations (Management Fees/G&A)	\$661,669
Depreciation	\$58,468
Insurance	\$322,044
Equipment Leases and Support	\$137,918
Fixed Costs to which 29% operating margin is <b>not</b> added	
Legal Support	\$35,338
<b>Total Fixed Costs</b>	<b>\$2,937,390</b>
<b>IRREGULAR COSTS</b>	
Trench Construction	\$116,390
License Appeal	\$10,000
Corrective Action	\$5,000
Site Assessments	\$5,000
Miscellaneous	\$54,782
<b>Total Irregular Costs</b>	<b>\$191,172</b>
<b>VARIABLE COSTS</b>	
<b>Variable Labor and Non-Labor Rates</b>	
Vault Purchase and Inspection (per vault)	\$186.79
ABC Waste Disposal (per shipment)	\$1,169.00
Slit Trench Operations (per slit trench offload)	\$23,423.00
Customer Assistance (per shipment)	\$80.75
Trench Records (per container)	\$325.00
<b>Variable Material Cost Rates (Vaults)</b>	
Class A Waste (per cubic foot)	\$40.29
Class B Waste (per cubic foot)	\$45.63
Class C Waste (per cubic foot)	\$49.62
Slit Trench Waste (per cubic foot)	\$156.19